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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/933,777	08/20/2001	Michael A. Baxter	20412-03873	6712
758	7590	07/11/2005	EXAMINER	
FENWICK & WEST LLP SILICON VALLEY CENTER 801 CALIFORNIA STREET MOUNTAIN VIEW, CA 94041			MAI, TAN V	
			ART UNIT	PAPER NUMBER
			2193	

DATE MAILED: 07/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/933,777

Applicant(s)

BAXTER, MICHAEL A.

Examiner

Tan V. Mai

Art Unit

2193

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 2/7/05, 2/22 & 1/14/02.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 January 2002 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/22/02.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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1. The abstract of the disclosure is objected to because legal phraseology is used in this paragraph (i.e., "comprises"). Correction is required. See MPEP § 608.01(b).

2. The disclosure is objected to because of the following informalities:

In the "BRIEF DESCRIPTION OF THE DRAWINGS", the "Figure 6B ..." and "Figure 8 ..." should be -- Figures 6B-1 and 6B-2 ---- and -- Figures 8A-1 and 8A-2 ----, respectively.

Appropriate correction is required.

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 28-39 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims recite a method for performing a mathematical function. The claimed invention comprises a plurality of mental steps whereby the claimed mental steps are non-statutory subject matter. Specifically, the claimed method steps, i.e., claim 28, can be practiced mentally in conjunction with pen and paper.

However, in order for such a claimed computer-related process to be statutory, the method claims must include either a step that results: (1) in a physical transformation outside the computer, (2) in a limitation to a practical application, or (3) performed specific machine/element(s). Accordingly, claims 28-39 are clearly directed to a non-statutory process.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 16 and 28 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Thayer et al.

As per independent claim 1, Thayer et al teach, e.g., see Fig. 8, the claimed combination. For example, elements 128, 124 and 116 are considered the claimed “register file”, “switch” and “arithmetic logic unit”, respectively.

Due to the similarity of claims 16 and 28 to claim 1, they are rejected under a similar rationale.

6. Claims 1, 16 and 28 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Dapper et al.

As per independent claim 1, Dapper et al teach, e.g., see Fig. 74, the claimed combination. For example, elements 2612 & 2252, 2634 and 2633 are considered the claimed “register file”, “switch” and “arithmetic logic unit”, respectively.

Due to the similarity of claims 16 and 28 to claim 1, they are rejected under a similar rationale.

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7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 17-27 and 29-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thayer et al.

Thayer et al have been discussed in paragraph #5 above.

The dependent claims 17-27 and 29-39 detail the functions of the "routing" and "arithmetic logic". These functions are obvious to a person having ordinary skill in the art. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to design the claimed invention according to Thayer et al's teachings because the device is a digital processing device having "routing" feature as claimed.

9. Claims 17-27 and 29-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dapper et al.

Dapper et al have been discussed in paragraph #6 above.

The dependent claims 17-27 and 29-39 detail the functions of the "routing" and "arithmetic logic". These functions are obvious to a person having ordinary skill in the art. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to design the claimed invention according to Dapperr et al's teachings because the device is a digital processing device having "routing" feature as claimed.

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10. Claims 2-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thayer et al in view of either Goke et al (Applicant's admission Prior Art) or Premkumar et al (Applicant's admission Prior Art).

Thayer et al have been discussed in paragraph #5 above.

As per dependent claim 2, the claim details the "switch is a Banyan switch". The "Banyan switch" is old and well known in the art. For example, see Goke et al or Premkumar et al. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine either Goke et al or Premkumar et al's Banyan switch in Thayer et al thereby making the claimed invention, because the proposed device is a digital processing device having "Banyan switch" for "routing" as claimed.

Due to the similarity of claims 3-15 to claims 17-27 and 29-39, they are rejected under a similar rationale.

11. Claims 2-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over dapper et al in view of either Goke et al (Applicant's admission Prior Art) or Premkumar et al (Applicant's admission Prior Art).

Dapper et al have been discussed in paragraph #6 above.

As per dependent claim 2, the claim details the "switch is a Banyan switch". The "Banyan switch" is old and well known in the art. For example, see Goke et al or Premkumar et al. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine either Goke et al or Premkumar et al's Banyan switch in Dapper et al thereby making the claimed invention, because the proposed device is a digital processing device having "Banyan switch" for "routing" as claimed.

Due to the similarity of claims 3-15 to claims 17-27 and 29-39, they are rejected under a similar rationale.

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cited references are art of interest.

Langhammer discloses a programmable logic device having (1) "routing channels" and (2) "variety of operations" (e.g., **bitwise**, logic, arithmetic, etc.) features.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan V. Mai whose telephone number is (571) 272-3726. The examiner can normally be reached on Mon-Wed and Fri. from 9:30am to 2:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki, can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is:

Official (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.



Tan V. Mai  
Primary Examiner